*Science, Technology, Engineering & Mathematics Division*

**HORTICULTURE**

**This program is accredited by the National Association of Landscape Professionals (NALP).**

The Horticulture Program is designed as a career program leading to the associate in science degree. The goal of the Horticulture Program is to prepare students for employment in landscaping, garden centers, greenhouses, or related businesses and for further education. The program includes the completion of two full years of study and an appropriate supervised cooperative work experience with nurseries, landscape businesses and greenhouses.

NVCC is a member of the CT Nursery and Landscape Association, CT Greenhouse Growers Association, CT Horticulture Society, and CT Florist Association.

The Horticulture Program is recognized by the Guaranteed Admissions Program with the UCONN College of Agriculture, Health, and Natural Resources. Students interested in the UCONN guaranteed admissions program must speak with the Horticulture Program Coordinator before registering. Visit <http://admissions.uconn.edu/apply/transfer/gap>for additional details.

*General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.*

*Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.*

|  |  |  |
| --- | --- | --- |
| **Competency or Program Requirement** | **Course Number and Title** | Required Credits |
| **FIRST SEMESTER** |  |  |
| Critical Analysis and Logical Thinking/  Written Communication | ENG\*H101 Composition | 3 |
| Quantitative Reasoning ◊ | MAT\*H121 Applications for  Business and Other Careers, **OR**  MAT\*H135 Topics in Contemporary  Math, **OR** higher than MAT\*H137  Intermediate Algebra | 3 |
| Scientific Knowledge and Understanding | HRT\*H102 Woody Plants | 3 |
| Program Requirement | HRT\*H101 Landscape Construction | 4 |
| Program Requirement | HRT\*H104 Soil Systems  (or)  CHE 111 Concepts of Chemistry | 3 |
| **SECOND SEMESTER** |  |  |
| Aesthetic Dimensions | HRT\*H202 Landscape Design I | 3 |
| Scientific Reasoning | HRT\*H222 Greenhouse Management & Operations | 4 |
| Program Requirement | HRT\*H103 Herbaceous Plants | 3 |
| Program Requirement | BIO\*H155 General Botany | 4 |
| **SUMMER SEMESTER** |  |  |
| Program Requirement | HRT\*H290 CWE/Co-Op2 | 3 |
| **THIRD SEMESTER** |  |  |
| Oral Communication | Choose any Oral Communication Competency listed | 3 |
| Program Requirement | HRT\*H215 Pest Control in Ornamentals and Turf | 3 |
| Program Requirement | Directed elective12 | 3 |
| Program Requirement | HRT\*H207 Landscape Maintenance | 3 |
| Written Communication | ENG\*H102 Literature and Composition | 3 |
| **FOURTH SEMESTER** |  |  |
| Continuing Learning/Information Literacy and Ethical Dimensions | ECN\*H101 Principles of Macroeconomics | 3 |
| Historical Knowledge and Understanding | Exempt | 0 |
| Program Requirement | HRT\*H208 Landscape Contract Admin. | 3 |
| Program Requirement | Directed elective3 | 3 |
| Program Requirement | Directed elective3 | 3 |

# Total Credits: 60

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

1 ENV\*H240 Principles of Soil and Water Resources is only offered in the Fall semester

2 HRT\*H290 Placement is required for this course. Students need to contact the program coordinator early in the semester prior to taking the course.

3 Directed electives: HRT\*H105, HRT\*H106, HRT\*H107, HRT\*H115, HRT\*H1244, HRT\*H1254, HRT\*H203, HRT\*H204, HRT\*H206, HRT\*H219, HRT\*H224, HRT\*H240, HRT\*H250, ART\*H111

4 HRT\*124 Floral Design I and HRT\*125 Floral Design II have not been offered recently.

◊ MAT\*H137 and courses numbered lower than MAT\*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

|  |
| --- |
| ***Program Outcomes*** |

*Upon successful completion of all program requirements, graduates will be able to:*

1. Demonstrate proficiency in the construction of hardscape landscape components, including pavers, concrete and wood structures.
2. Identify common ornamental trees and shrubs, ground covers by botanical and common names, and describe characteristics of each.
3. Review and discuss the characteristics of soil, structure, soil erosion, and soil restoration.
4. Identify common herbaceous perennials and annuals by botanical and common names, and describe characteristics of each.
5. Analyze and design landscapes for both residential and commercial properties utilizing a variety of sustainable horticulture techniques and procedures and meet the needs of a diverse clientele.

***Associate***

***Degree***

***Programs***

1. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
2. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
3. Summarize and assess plant growth requirements for commercial production of greenhouse crops, and economically produce a crop from seed or cutting to harvest and sales.
4. Relate basic knowledge of botany to plant growth and culture.
5. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work in the horticulture field.
6. Solve problems related to the use of soil amendments, fertilizers, and plant growth control chemicals, and apply effective cost estimating, pricing, and record keeping techniques.
7. Create, manage, and gain profit from running a landscape maintenance business.
8. Identify, analyze, and troubleshoot common landscape and greenhouse pests and diseases within the landscape utilizing integrated pest management practices.
9. Practice specialized techniques within the horticulture field such as advanced design, food production, arboriculture, or turf management.